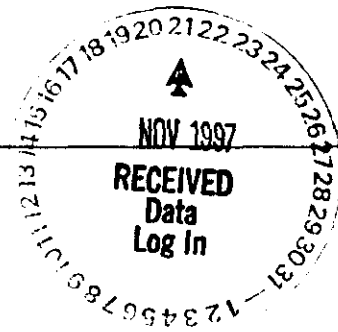


0049014


**RECRA
LabNet**

a division of Recra Environmental, Inc.

Virtual Laboratories Everywhere


**Recra LabNet Philadelphia
Analytical Report**

Client : TNU-HANFORD
RFW# : 9710L777
SDG# : H0106

W.O.# : 10985-001-001-9999-00
Date Received: 10-11-97

METALS CASE NARRATIVE

1. This narrative covers the analyses of 1 water sample.
2. The sample was prepared and analyzed in accordance with methods checked on the attached glossary.
3. All analyses were performed within the required holding times.
4. The cooler temperature has been recorded on the Chain of Custody.
5. All Initial and Continuing Calibration Verifications (ICV/CCVs) were within control limits.
6. All Initial and Continuing Calibration Blanks (ICB/CCBs) were within control limits.
7. All preparation/method blanks were within method criteria. Refer to the Inorganics Method Blank Data Summary.
8. All ICP Interference Check Standards were within control limits.
9. All laboratory control samples (LCS) were within the laboratory control limits. Refer to the Inorganics Laboratory Control Standards Report.
10. All matrix spike (MS) and matrix spike duplicate (MSD) recoveries were within the 80-120% control limits. Refer to the Inorganics Accuracy Report.
11. All MSs and MSDs were within the 20% Relative Percent Difference (RPD) control limits. Refer to the Inorganics Matrix Spike Duplicate Report.
12. All duplicate analyses were within the 20% RPD control limits. Refer to the Inorganics Precision Report.
13. For the purposes of this report, the data has been reported to the Instrument Detection Limit (IDL). Values between the IDL and the Practical Quantitation Limit (PQL) are acquired in a region of less-certain quantification.

[Signature]
 J. Michael Taylor
 Vice President and Laboratory Manager
 Lionville Analytical Laboratory

11-14-97
 Date

sklm10-77

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 12 pages.

001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

SDG#: H0106

Laboratory Batch: 9710L777

W.O.#: 10985-001-001-9999-00

Collection Date: 10-11-97

SAMPLE ID

BOM307

LABORATORY ID

9710L777-001



METALS METHODS GLOSSARY

The following methods are used as reference for the digestion and analysis of samples contained within the RFW Lot#: 9710L777

Leaching Procedure: ☐ 1310 ☐ 1311 ☐ 1312 ☐ Other: _____

CLP Metals ☐ Digestion and ☐ Analysis Methods: ☐ ILM03.0 ☐ ILM04.0

Metals Digestion Methods: ☒ 3005A ☐ 3010A ☐ 3015 ☐ 3020A ☐ 3050A ☐ 3051 ☐ 200.7 ☐ SS17
☐ Other: _____

Metals Analysis Methods

	SW846	EPA	STD MTD	EPA OSWR	USATHAM
Aluminum	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Antimony	<input type="checkbox"/> 6010A <input type="checkbox"/> 7041 ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 204.2			<input type="checkbox"/> 99
Arsenic	<input type="checkbox"/> 6010A <input type="checkbox"/> 7060A ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 206.2	<input type="checkbox"/> 3113B		<input type="checkbox"/> 99
Barium	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Beryllium	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Bismuth	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7 ¹		<input type="checkbox"/> 1620	<input type="checkbox"/> 99
Boron	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Cadmium	<input type="checkbox"/> 6010A <input type="checkbox"/> 7131A ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 213.2			<input type="checkbox"/> 99
Calcium	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Chromium	<input checked="" type="checkbox"/> 6010A <input type="checkbox"/> 7191 ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 218.2			<input type="checkbox"/> SS17
Cobalt	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Copper	<input type="checkbox"/> 6010A <input type="checkbox"/> 7211 ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 220.2			<input type="checkbox"/> 99
Iron	<input checked="" type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Lead	<input type="checkbox"/> 6010A <input type="checkbox"/> 7421 ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 239.2	<input type="checkbox"/> 3113B		<input type="checkbox"/> 99
Lithium	<input type="checkbox"/> 6010A <input type="checkbox"/> 7430 ⁴	<input type="checkbox"/> 200.7		<input type="checkbox"/> 1620	<input type="checkbox"/> 99
Magnesium	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Manganese	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Mercury	<input type="checkbox"/> 7470A ³ <input type="checkbox"/> 7471A ³	<input type="checkbox"/> 245.1 ² <input type="checkbox"/> 245.5 ²			<input type="checkbox"/> 99
Molybdenum	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Nickel	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Potassium	<input type="checkbox"/> 6010A <input type="checkbox"/> 7610 ⁴	<input type="checkbox"/> 200.7 <input type="checkbox"/> 258.1 ⁴			<input type="checkbox"/> 99
Rare Earths	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7 ¹		<input type="checkbox"/> 1620	<input type="checkbox"/> 99
Selenium	<input type="checkbox"/> 6010A <input type="checkbox"/> 7740 ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 270.2	<input type="checkbox"/> 3113B		<input type="checkbox"/> 99
Silicon	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7		<input type="checkbox"/> 1620	<input type="checkbox"/> 99
Silica	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7		<input type="checkbox"/> 1620	<input type="checkbox"/> 99
Silver	<input type="checkbox"/> 6010A <input type="checkbox"/> 7761 ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 272.2			<input type="checkbox"/> 99
Sodium	<input type="checkbox"/> 6010A <input type="checkbox"/> 7770 ⁴	<input type="checkbox"/> 200.7 <input type="checkbox"/> 273.1 ⁴			<input type="checkbox"/> 99
Strontium	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Thallium	<input type="checkbox"/> 6010A <input type="checkbox"/> 7841 ⁵	<input type="checkbox"/> 200.7 <input type="checkbox"/> 279.2 <input type="checkbox"/> 200.9			<input type="checkbox"/> 99
Tin	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Titanium	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Uranium	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7 ¹		<input type="checkbox"/> 1620	<input type="checkbox"/> 99
Vanadium	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Zinc	<input type="checkbox"/> 6010A	<input type="checkbox"/> 200.7			<input type="checkbox"/> 99
Zirconium	<input type="checkbox"/> 6010A ¹	<input type="checkbox"/> 200.7 ¹		<input type="checkbox"/> 1620	<input type="checkbox"/> 99

Other: _____

Method: _____

METHOD REFERENCES AND DATA QUALIFIERS

DATA QUALIFIERS

U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.

* = Indicates that the original sample result is greater than 4x the spike amount added.

ABBREVIATIONS

MB = Method or Preparation Blank.

MS = Matrix Spike.

MSD = Matrix Spike Duplicate.

REP = Sample Replicate

LCS = Laboratory Control Sample.

NC = Not calculated.

ANALYTICAL METAL METHODS

1. Not included in the method element list.
2. Modified Hg: Hg1 and Hg2 require less total volume of digestate due to the autosampler analysis. Sample volumes and reagents for mercury determinations in water and soil have been proportionately scaled down to adapt to this semi-automated technique. The sample volume used for water analysis is 33 mL. For soils, 0.1 grams of sample is taken to a final volume of 50 mL (including all reagents).
3. Modified Hg: Hg1 and Hg2 require less total volume of digestate due to the autosampler analysis. Sample volumes and reagents for mercury determinations in water and soil have been proportionately scaled down to adapt to this semi-automated technique. The sample volume used for water analysis is 33 mL. For soils, three 0.1 gram of sample is taken to a final volume of 50 mL (including all reagents).
4. Flame AA.
5. Graphite Furnace AA.

RFW 21-21L-033/N-10/96

INORGANICS DATA SUMMARY REPORT 11/06/97

CLIENT: TNU-HANFORD

RECRA LOT # 97111111

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-----	-----	-----	-----	-----	-----	-----
-001	BOM307	Chromium, Total	5.9	UG/L	4.0	1.0
		Iron, Total	723	UG/L	4.0	1.0

INORGANICS METHOD BLANK DATA SUMMARY PAGE 11/06/97

CLIENT: TNU-HANFORD

WORK ORDER: 13985-001-001-9999-00

RECRA LOT # 101-1-1000

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	97L2183-MB1	Chromium, Total	3.1 u	UG/L	1.0	1.0
		Iron, Total	12.2	UG/L	1.0	1.0

Recre LabNet - Unionville

INORGANICS ACCURACY REPORT 11/06/97

CLIENT: TNU-HANFORD

RECRA LOT #: 97110000

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	UNSPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	PRECISE RECOVERY	DILUTION FACTOR (SPK)
-001	BOM307	Chromium, Total	143	5.9	200	98.9	1.0
		Chromium, Total MSD	146	5.9	200	98.9	1.0
		Iron, Total	1480	723	1000	98.9	1.0
		Iron, Total MSD	1490	723	1000	98.9	1.0

Recra LabNet Lionville

INORGANIC DUPLICATE SPIKE REPORT 11/06/97

CLIENT: TNU-HANFORD

RECRA LOT # 001 11/06/97

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
-001	BOM307	Chromium, Total	88.8	90.0	1.5
		Iron, Total	96.0	96.3	0.34

Recre LabNet Lionville

INORGANICS PRECISION REPORT 11/06/97

CLIENT: TNU-HANFORD

RECRA LOT #: 001-1000

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR (REP)
-001REP	BOM307	Chromium, Total	5.9	5.6	1.0	1.0
		Iron, Total	803	801	10.0	1.0

Recra LabNet Lionville

INORGANICS LABORATORY CONTROL STANDARDS REPORT 11/06/97

CLIENT: TNU-HANFORD

RECRA LOT #: 9711000

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	UNPIKED SAMPLE	SPIKED AMOUNT	UNITS	RECOV
-----	-----	-----	-----	-----	-----	-----
LCS1	97L2183-LC1	Chromium, LCS	478	500	UG/L	65
		Iron, LCS	4780	5000	UG/L	65

Recra LabNet - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD

DATE RECEIVED: 10/11/97

RFW LOT # 9710L777

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOM307						
CHROMIUM, TOTAL	001	W	97L2183	10/07/97	11/03/97	11/03/97
CHROMIUM, TOTAL	001 REP	W	97L2183	10/07/97	11/03/97	11/03/97
CHROMIUM, TOTAL	001 MS	W	97L2183	10/07/97	11/03/97	11/03/97
CHROMIUM, TOTAL	001 MSD	W	97L2183	10/07/97	11/03/97	11/03/97
IRON, TOTAL	001	W	97L2183	10/07/97	11/03/97	11/03/97
IRON, TOTAL	001 REP	W	97L2183	10/07/97	11/03/97	11/03/97
IRON, TOTAL	001 MS	W	97L2183	10/07/97	11/03/97	11/03/97
IRON, TOTAL	001 MSD	W	97L2183	10/07/97	11/03/97	11/03/97

LAB QC:

CHROMIUM LABORATORY	LC1 BS	W	97L2183	N/A	11/03/97	11/03/97
CHROMIUM, TOTAL	MB1	W	97L2183	N/A	11/03/97	11/03/97
IRON LABORATORY	LC1 BS	W	97L2183	N/A	11/03/97	11/03/97
IRON, TOTAL	MB1	W	97L2183	N/A	11/03/97	11/03/97



9710L777

Custody Transfer Record/Lab Work Request



a division of Recra Environmental, Inc.

Virtual Laboratories Everywhere

Recra LabNet Philadelphia Analytical Report

Client : TNU-HANFORD
RFW# : 9710L777
SDG# : H0106

W.O. # : 10985-001-001-9999-00
Date Received: 10-11-97

INORGANIC CASE NARRATIVE

1. This narrative covers the analyses of 1 water sample.
2. The sample was prepared and analyzed in accordance with the methods checked on the attached glossary. For NPDES samples: Ammonia distillations for method 350.3 were not performed as specified in 40 CFR part 136.
3. Sample holding times as required by the method and/or contract were met.
4. The cooler temperature was recorded on the chain-of-custody.
5. The method blanks were within method criteria.
6. The Laboratory Control Samples (LCS) for Ammonia were within the laboratory control limits (LCL), however the LCS 97LOG053-MBI for Oil and Grease was below the LCL of 73.4-115.7%. The duplicate LCS were within the 20% Relative Percent Difference (RPD) control limit.
7. The matrix spike recoveries for Ammonia were within the 75-125% control limits. The duplicate spike was within the 20% RPD control limit.
8. The replicate analyses were within the 20% RPD control limit.

J. Michael Taylor
J. Michael Taylor
Vice President and Laboratory Manager
Lionville Analytical Laboratory

11-12-97

Date

npjv10-777

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 11 pages.

WET CHEMISTRY METHODS GLOSSARY FOR ANALYSIS OF WATER SAMPLES

	<u>EPA 600</u>	<u>SW846</u>	<u>OTHER</u>
Acidity	__ 305.1		
__ Alkalinity __ Bicarbonate __ Carbonate	__ 310.1		
BOD	__ 405.1		__ 5210B (b)
Ion Chromatography:			
__ Bromide __ Chloride __ Fluoride	__ 300.0	__ 9056	
__ Nitrite __ Nitrate __ Phosphate	__ 300.0	__ 9056	
__ Sulfate __ Formate __ Acetate __ Oxalate	__ 300.0	__ 9056	
Chloride	__ 325.2	__ 9251	
Chlorine Residual	__ 330.5 (mod)		
Cyanide Amenable to Chlorination	__ 335.2	__ 9010A	
Cyanide (Total)	__ 335.2	__ 9010A __ 9012	__ ILM04.0 (c)
Cyanide, Weak Acid Dissociable			__ 412 (a) __ 4500CN-I (b)
COD	__ 410.4 (mod)		__ 5220 C (b)
Color	__ 110.2		
Corrosivity (by Coupon)		__ 1110 (mod)	
Chromium VI		__ 7196A	__ 3500Cr-D (b)
Fluoride	__ 340.2		
Hardness, Calcium	__ 215.2		
Hardness, Total	__ 130.2		
Iodide			__ ASTM D19P202 (1)
Surfactant	__ 425.1		
__ Nitrate-Nitrite __ Nitrate __ Nitrite	__ 353.2		
Ammonia	__ 350.3		
Total __ Kjeldahl Nitrogen __ Organic Nitrogen	__ 351.4		
Total __ Organic __ Inorganic Carbon	__ 415.1	__ 9060	
Oil and Grease	__ 413.1	__ 9070	
__ pH __ pH, Paper	__ 150.1	__ 9040A __ 9041A	
Petroleum Hydrocarbons, Total Recoverable	__ 418.1		
Phenol	__ 420.1 __ 420.2	__ 9065 __ 9066	
__ Ortho Phosphate __ Total Phosphate	__ 365.2		__ 4500-P B __ C
Salinity			__ 210A (a) __ 2520B (b)
Settleable Solids	__ 160.5		
Sulfide	__ 376.2 __ 376.1	__ 9030A	
Reactive __ Cyanide __ Sulfide		__ Sec 7.3	
Silica	__ 370.1		
Sulfite	__ 377.1		
Sulfate	__ 375.4	__ 9038	
Specific Conductance	__ 120.1	__ 9050	
Specific Gravity			__ 213E (a)
__ TCLP __ TCLV		__ 1311	
Synthetic Precipitation Leach		__ 1312	
Total __ Dissolved __ Suspended __ Solids	160 __.1 __.2 __.3		
Total Organic Halides	__ 450.1	__ 9020B	
Turbidity	__ 180.1		
Volatile Solids __ Total __ Dissolved __ Suspended	__ 160.4		
Other: _____		Method: _____	

METHOD REFERENCES AND DATA QUALIFIERS

DATA QUALIFIERS

- U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.
- * = Indicates that the original sample result is greater than 4x the spike amount added.

ABBREVIATIONS

- MB = Method or Preparation Blank.
MS = Matrix Spike.
MSD = Matrix Spike Duplicate.
REP = Sample Replicate
LC = Laboratory Control Sample.
NC = Not calculated.

A suffix of -R, -S, or -T following these codes indicate a replicate, spike or sample duplicate analysis respectively.

ANALYTICAL WET CHEMISTRY METHODS

1. ASTM Standard Methods.
2. USEPA Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020).
3. Test Methods for Evaluating Solid Waste (USEPA SW-846).
 - a. Standard Methods for the Examination of Water and Waste, 16 ed., (1989).
 - b. Standard Methods for the Examination of Water and Waste, 17 ed., (1983)
 - c. Method of Soil Analysis, Part 1, Physical and Mineralogical Methods, 2nd. Ed. (1986)
 - d. Method of Soil Analysis, Part 2, Chemical and Microbiological Properties, Am. Soc. Agron., Madison, WI (1965)
 - e. USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis.
 - f. Code of Federal Regulations.

RFW 21-21L-034/D-06/96

Recra LabNet - Lionville

INORGANICS DATA SUMMARY REPORT 11/07/97

CLIENT: TNU-HANFORD

RECRA LOT #: 9710L777

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-----	-----	-----	-----	-----	-----	-----
-001	BOM307	Ammonia, as N	0.10 u	MG/L	0.10	1.0
		Oil & Grease Gravimetri	2.4	MG/L	1.0	1.0

Recra LabNet - Lionville

INORGANICS METHOD BLANK DATA SUMMARY PAGE 11/07/97

CLIENT: TNU-HANFORD

RECRA LOT #: 9710L777

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-----	-----	-----	-----	-----	-----	-----
BLANK10	97LAMA62-MB1	Ammonia, as N	0.10 u	MG/L	0.10	1.0
BLANK10	97LOG053-MB1	Oil & Grease Gravimetri	3.8	MG/L	1.0	1.0

Recra LabNet - Lionville

INORGANICS ACCURACY REPORT 11/07/97

INT: TNU-HANFORD

RECRA LOT #: 9710L777

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR (SPK)
-001	BOM307	Ammonia, as N	1.1	0.10u	1.0	108.0	1.0
		Ammonia, as N MSD	1.1	0.10u	1.0	107.0	1.0
BLANK10	97LAMA62-MB1	Ammonia, as N	1.0	0.10u	1.0	100	1.0
		Ammonia, as N MSD	0.96	0.10u	1.0	95.8	1.0
BLANK10	97LOG053-MB1	Oil & Grease Gravimetr	30.7	3.8	36.8	73.1	1.0
		Oil & Grease - Grav M	36.5	3.8	38.1	85.9	1.0

Recra LabNet - Lionville

INORGANICS DUPLICATE SPIKE REPORT 11/07/97

CLIENT: TNU-HANFORD

RECRA LOT #: 9710L777

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	SPIKE#1 SPIKE#2		
			%RECOV	%RECOV	%DIFF
-----	-----	-----	-----	-----	-----
-001	BOM307	Ammonia, as N	108.0	107.0	0.93
BLANK10	97LAMA62-MB1	Ammonia, as N	100	95.8	4.3
BLANK10	97LOG053-MB1	Oil & Grease - Grav	73.1	85.9	16.2

Recra LabNet - Lionville

INORGANICS PRECISION REPORT 11/07/97

CLIENT: TNU-HANFORD

RECRA LOT #: 9710L777

WORK ORDER: 10985-001-001-9999-00

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR (REP)
-001REP	BOM307	Ammonia, as N	0.10u	0.10u	NC	1.0
		Oil & Grease Gravimetri	2.4	2.2	8.7	1.0

Recra LabNet - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD

DATE RECEIVED: 10/11/97

RFW LOT # :9710L777

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOM307						
AMMONIA	001	W	97LAMA62	10/07/97	10/16/97	10/16/97
AMMONIA	001 REP	W	97LAMA62	10/07/97	10/16/97	10/16/97
AMMONIA	001 MS	W	97LAMA62	10/07/97	10/16/97	10/16/97
AMMONIA	001 MSD	W	97LAMA62	10/07/97	10/16/97	10/16/97
OIL & GREASE BY GRAV	001	W	97LOG053	10/07/97	10/30/97	10/31/97
OIL AND GREASE BY GR	001 REP	W	97LOG053	10/07/97	10/30/97	10/31/97

LAB QC:

AMMONIA	MB1	W	97LAMA62	N/A	10/16/97	10/16/97
AMMONIA	MB1 BS	W	97LAMA62	N/A	10/16/97	10/16/97
AMMONIA	MB1 BSD	W	97LAMA62	N/A	10/16/97	10/16/97
OIL & GREASE BY GRAV	MB1	W	97LOG053	N/A	10/30/97	10/31/97
OIL AND GREASE BY GR	MB1 BS	W	97LOG053	N/A	10/30/97	10/31/97
OIL AND GREASE BY GR	MB1 BSD	W	97LOG053	N/A	10/30/97	10/31/97

Custody Transfer Record/Lab Work Request

[illegible]

REFERENCES